

We claim

1. A timer device, comprising:

- contact means (35) operable between a first condition and a second condition,
- 5 - timer means (31),
- means (32) for storing a first time stamp, a second time stamp, and a first time-period value,
- control means (31) adapted for:
- setting a first time stamp in response to the contact means being operated between the first condition and the second condition,
- 10 - setting a second time stamp in response to the contact means being operated between the second condition and the first condition,
- calculating the time elapsed between the first and second time stamps,
- comparing the elapsed time with the first time-period value, and
- 15 - performing a first control action if the elapsed time is greater than the first time-period value.

2. A timer device as defined in claim 1, further comprising:

- stop watch means adapted for being reset in response to the control action, and
- 20 - display means (33) for indicating the time lapsed since reset of the stop watch means.

3. A timer device as defined in claim 1, further comprising:

- means (32) for storing a third time stamp, wherein the first control action replaces
- 25 the third time stamp with the first or second time stamp or a time value calculated on the basis of the first and/or second time stamp.

4. A timer device as defined in claim 1, further comprising first actuation means (36, 25) for cancelling the first control action.

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5. A timer device as defined in claim 1, further comprising first actuation means (36, 25) for confirming the first control action, whereby no confirmation will cancel the first control action.

35 6. A timer device as defined in claim 1, further comprising:

- means (32) for storing a second time-period value, and wherein the control means is further adapted for:
  - comparing the elapsed time with the second time-period value, and
  - performing a second control action if the elapsed time is greater than the second time-period value.

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7. A timer device as defined in claim 6, further comprising:

- first actuation means (25) for cancelling the second control action, and
- second actuation means (26), and

10 wherein the second control action replaces the third time stamp with the second time stamp or, in response to actuation of the second actuation means, with the first time stamp.

8. A timer device as defined in claim 6, further comprising:

- first actuation means (25) for confirming the second control action, whereby no confirmation will cancel the second control action, and
- second actuation means (26), and

15 wherein the second control action replaces the third time stamp with the second time stamp or, in response to actuation of the second actuation means, with the first time stamp.

20 9. A timer device as defined in claim 6, further comprising:

- first actuation means (25) for confirming the second control action, whereby no confirmation will cancel the second control action, and
- second actuation means (26), and

25 wherein the second control action replaces the third time stamp with the first time stamp or, in response to actuation of the second actuation means, with the second time stamp.

10. A timer device as defined in claim 1, further comprising:

- display means (33, 27, 28, 29) for displaying one or more time stamps and/or for indicating the time lapsed since the third time stamp.

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11. A device for use by a patient for medical self treatment, comprising:

- a first device portion (10) for performing an operation,
- a second device portion (20) comprising a timer device as defined in any of the previous claims,

35 wherein the first and second device portions have mutually cooperating coupling means for detachably assembling the first and second device portions to form a single port-

able unit, the contact means being operated between the first condition and the second condition when the first and second device portions are detached from each other, and the contact means being operated between the second condition and the first condition when the first and second device portions are attached to each other.

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12. A device as defined in claim 11, wherein the first device portion comprises means for administering a preset dose of a drug to the patient.

13. A device as defined in claim 12, wherein the first device portion further comprises a 10 distal end portion at which an infusion needle is or can be mounted, and the second device portion is in the form of a cap adapted to cover the distal end portion when the first and second device portions are attached to each other, the cap preferably comprising a body fluid analyzer.

15 14. A cap (20) having an open end and an interior space adapted to receive a medical device, the medical device comprising means for administering a preset dose of a drug to the patient, the cap comprising a timer device as defined in any of claims 1-10, wherein the contact means can be operated between the first condition and the second condition when the cap and the medical device are removed from each other, and the contact means can be operated between the second condition and the first condition when the medical device are received in the cap interior.  
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